

February 15, 1978

Mr. J. D. Crowder
Worthington Corporation
14 4th Avenue
East Orange, New Jersey 07017

Dear Mr. Crowder:

Since 1957 the City of Roanoke has operated the Chapel Forest Pump Station. We installed two Worthington pumps, Serial Nos. 1541670 and 1542617, that are type 1½ U-1, two stage volute centrifugal pumps. These pumps are powered by 5 HP, 3500 rpm Wagner Electric Company motors.

The two pumps were designed to deliver 40 gpm at 145 TDH. Originally, these pumps operated from the Peakwood Pump Station with a suction head of 30 PSI. Last year the City built and put on line a new reservoir between Peakwood and Chapel Forest. This dropped our suction pressure to 20 psi. Needless to say, the pumps do not deliver 40 gpm.

We have tried to determine the impeller size but so far have been unsuccessful. We feel that it may be possible to increase the impeller size and get our delivery back to design capacity. Our pump curve, copy enclosed, just doesn't give us the required information to determine either what we have now or what we would be required to do to increase our capacity. From the enclosed pump curve it appears we could increase impeller size with the existing motor and increase our delivery.

Tate Engineering tried to get us some information but could do no better than the enclosed curve which was submitted with the pump. They thought that you might be able to supply additional information. We would appreciate any additional information you could supply.

Thanking you, we are

Very truly yours,



L. Bane Coburn
Engineer

LBC/i
Enclosure
cc: Mr. Lewis E. Grant